4 stroke kit user manual

We chose to start with a new Schwinn Skyliner Cruiser Bike. This bike was chosen because of the square drive shaft pedal assembly, and the derailler chain adjustment system. The center frame area has enough room to mount the 49 cc 4 Stroke motor/gearbox assembly. Purchased this bike from Wal-Mart at a price of $149.99

Please note: This kit is generic to fit many bikes. You may have to purchase a couple of longer bolts to mount the parts, if your bike has larger tubes, etc.

The bolts are metric, you will need an 8mm, 10mm, 12mm, 14mm wrench, Philips screwdriver, etc.

Step 1

Note: The replacement pedal assembly is curved to provide more clearance for the motor and gearbox, than the straight pedals on the bike.

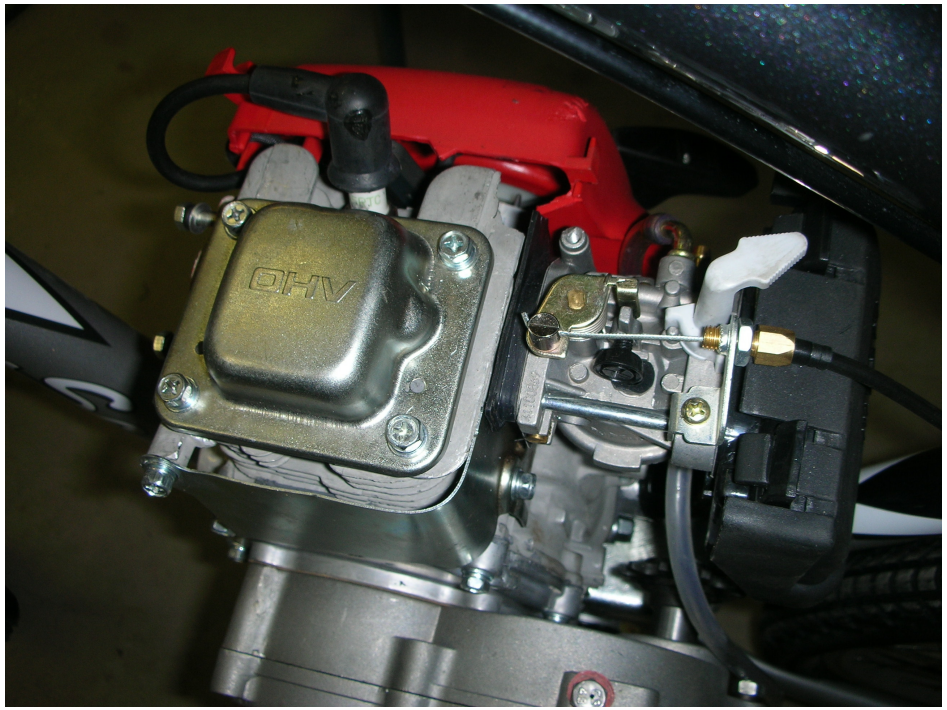
Remove the existing pedal assembly by removing the plastic cover on both pedals, and removing the bolt that is securing the pedals to the square shaft. Remove the single pedal and the sprocket pedal assembly. Replace with the new sprocket and pedal assembly. If you wish to install the existing bike plastic chain guard ring (if equipped), mark and drill holes in the new sprocket to mount the ring. Remove the large drive sprocket de-railler assembly from the bike frame, located on the vertical bike frame tube above the pedal assembly. The cable can be used for operating the motor throttle, or use the throttle grip assembly and cable provided with the kit.

Step 2

Mount the motor bracket to the bike tubes as shown. The bracket should be tipped forward slightly to allow clearance for the pedal radius, so the pedals do not hit the motor recoil starter cover. Before tightening, set the motor on the mount and check for clearances.

Step 3

Mount the motor on the mounting bracket with the 4 bolts provided with a flat washer and lock washer on each. Again, check the pedals for clearance on the motor.



Step 4

Install the De-railler cable housing and cable to the motor throttle arm. The left shift twist grip can then be used for controlling the motor speed, if a strong return spring is installed on the motor to ensure that the throttle on the motor closes when the twist handle is released. **This is very important! The engine speed must slow to an idle when the twist grip is released, or this can cause an accident, and possible injury.!!**

Step 5

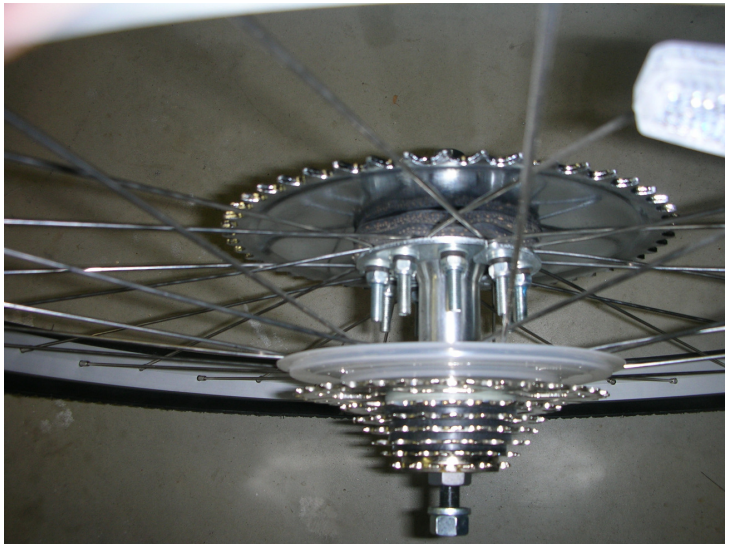
Mount the muffler on the exhaust port of the motor. loosen the motor bracket bolts slightly to allow clearance for the exhaust pipe to the bike frame. Retighten the bolts.

Step 6

Unpack the driven sprocket mounting package and make sure there are (9) bolts and 2 rubber fabric sprocket cushion rings. Cut one of the fabric rings so that it can be placed inside the wheel spokes.

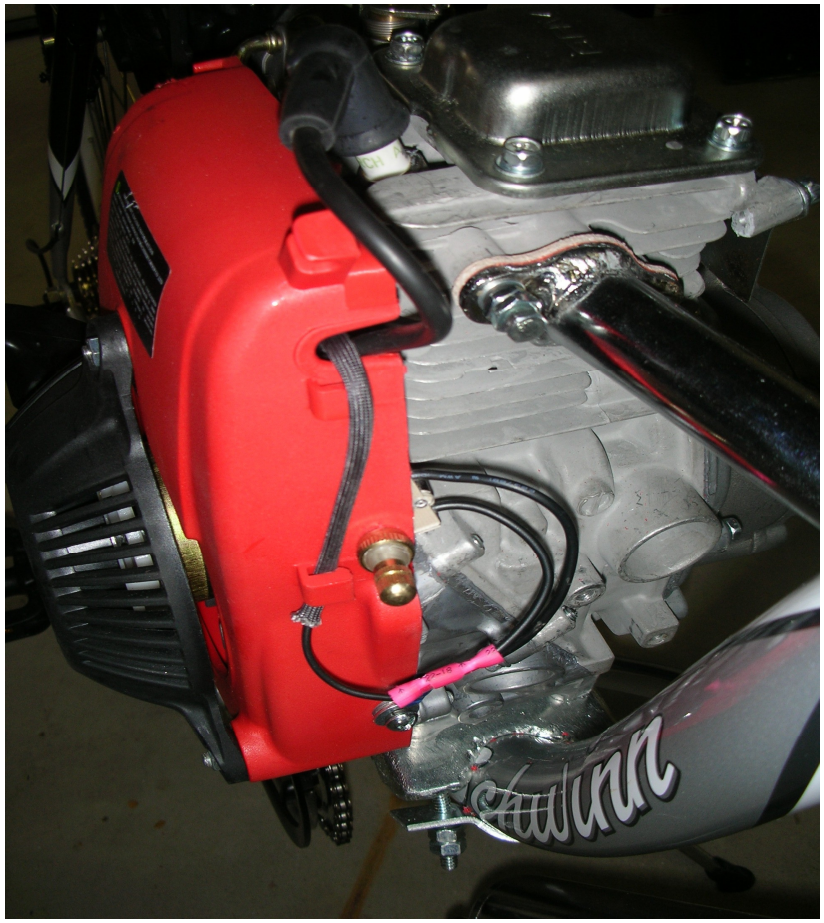
Step 7

Install the wheel sprocket with the (3) metal backing plates inside the spokes, and the (2) rubber fabric rings on both sides of the spokes. The assembly will be: large sprocket, fabric ring, spokes, fabric ring, metal backing plates. Center the sprocket on the bike wheel and tighten the bolts, equally to keep the sprocket centered.



Step 8

Reinstall the wheel, install the chain (links may have to be taken out for correct length), and mount the chain guard as shown. Install the chain tensioner pulley to the bike frame to tighten the bottom of the chain. Make sure the snap ring on the master link has the open end pointing away from the chain direction when the bike is operating, or it can unsnap.



Step 9

Purchase a toggle switch, or twist switch and wire the "kill" switch wire that is on the motor through the switch and wire the other switch wire to the motor to ground the motor to stop it. Drill a proper sized hole in the plastic fan housing as shown.

Step 10

Mount the gas tank on the upper bike frame tube, taking care not to pinch any cables that are located under the tube. (bracket to frame only-no cables between bracket and tube).

Step 10

Install fuel shut off valve to tank and connect the PVC gas line to the engine fuel inlet as shown. Check for leaks and fix, if any.

Step 11

Take a minute and admire your work. This is one of the cleanest bike motor installations on the market.

Fill the engine with 30W motor oil to the full level on the plug.

Fill the tank with regular gas, and go riding!

After riding for approximately 10 minutes or so, recheck the chain tension roller to ensure the bottom of the chain is not loose, and recheck all the bike bolts and nuts to ensure they are all tight.

Thank You
RB